

Detached accessory dwelling unit – key minimum code requirements

We explain the City's requirements for detached accessory dwelling units (ADUs). This includes an addition above a detached garage.

To get a building permit for a detached accessory dwelling unit (ADU), property owners must:

- Create a construction drawing
- Follow requirements of the 2020 Minnesota Residential Code
- [Submit the plans to Minneapolis Development Review](#)

Key minimum code requirements for a detached ADU:

Building

Rainwater

Manage rainwater runoff. Typically roof water discharges towards the alley or within the yard to avoid water intrusion to the neighboring buildings. Also see plumbing section below.

Frost

- Buildings containing dwellings must have frost footings. Existing detached garages are not typically on frost-protected footings. Other footing materials or systems shall be designed in accordance with accepted engineering practice. (R403.1.2).
[Read Section R403.1.2](#)
- Frost-protected shallow foundations shall meet the requirements of IRC Sections 403.3.1 and 403.1.4. Note that this method requires a heated main floor level and would not apply to a building with garage use on the main level.
[Read Section 403.1.4](#)

Property line

- Walls and eaves within five feet of the lot line are to be one-hour rated (except walls facing the alley).
- Eaves/overhangs shall not extend closer than two feet to the lot line (exception for alley side).
- Openings (windows, doors, vents, etc.) are not permitted within three feet of side (shared) property line (exception for alley side).

Garage

- Garage to be separated from dwelling unit, including the exit, with one-hour fire assembly and 20-minute doors.
- The ADU exit shall discharge directly outside the structure without entering the garage, or through a fire-rated stair.
- Ceiling between garage and dwelling unit shall have R-30 insulation.

Habitable space and ceiling

- Habitable space in the ADU and hallways, bathrooms, toilet rooms, laundry rooms shall have a ceiling height of not less than seven feet. (R305.1)
- When the dwelling has a sloped ceiling, at least 50% of the required floor area of the room shall have a ceiling height of at least seven feet and no portion of required floor area may have a ceiling height of less than five feet tall. (R305.1 ex. 1)

Stairs

- Width: 36" (minimum)
- Rise: 7-¾" (maximum)
- Run/Tread: 10" (minimum)
- Headroom: 6'-8" (minimum)

Egress windows

Each sleeping room shall have an egress window

- [Read Minneapolis bulletin on egress windows](#)
- [Read Minnesota State Fire Code Section 1104.25 through 1104.25.5.2](#)

Smoke and carbon monoxide detectors

Smoke and carbon monoxide detectors and all electrical to be hard wired.

Plumbing

Water and sewer connections are specific to a PID number. A detached ADU is an accessory structure to the primary dwelling and is typically served through water and sewer service extensions from the primary structure to the ADU. However, dedicated water and/or sewer services to a detached ADU may be allowed in special circumstances. The layout and design of any new services shall be in accordance with engineering design standards and governing ordinances as well as the Minnesota Plumbing Code.

Domestic water services

A licensed master plumber or Minnesota registered engineer shall confirm that the total demand (or loading) from the primary structure and the ADU can be served by the existing service in accordance with the methods outlined in the Minnesota Plumbing Code.

- If a service is undersized, it shall be discontinued and a properly sized service shall be designed and installed. The minimum depth of cover for a new water service is 8'-0".
- If the existing service is constructed of lead materials, it shall be replaced in its entirety prior to a service extension to an ADU.
- A water service extension from a primary residence to an ADU shall be protected from freezing as described in Minnesota Plumbing Code Sections 312.6 and 609.1.

[Read Minnesota Plumbing Code Section 312.6](#)

[Read Minnesota Plumbing Code Section 609.1](#)

Water service meters

- If the ADU is served through a water service extension from the primary structure, a single water service meter shall be supplied and read by the city. The meter shall be housed within the primary dwelling unit or principal structure as per governing ordinances. Submetering will be the responsibility of the property owner if desired.
- If the ADU is served with its own dedicated line, it shall have a water service meter separate from the primary structure and shall be supplied and read by the city.

Sanitary sewer services

The plumbing designer shall confirm that the service is adequately sized to accommodate the total demand (or loading) from the primary structure and the ADU. If an existing service is not appropriately sized, it shall be discontinued, and a properly sized service shall be designed and installed.

- Sewer piping exiting an ADU should be gravity drainage piping. If pumping is required, the pumping equipment should be located in the primary dwelling. Where this configuration is not practicable, pumped underground sewer piping from an ADU to a primary dwelling may be allowed on a case-by-case basis subject to acceptance by plumbing plan review prior to installation.
 - Pumped underground sewer piping, when accepted, shall be located a minimum of 10'-0" from any buried water piping as described in Minnesota Plumbing Code 4714.609.6.1.
 - Pumped underground sewer piping, when accepted, shall be provided with freeze protection equivalent to that required for buried water piping.
- All connections to the city sewer mains and within the right-of-way must be gravity drains.
- Exterior sewer piping draining from the ADU shall be protected from freezing as described in Minnesota Plumbing Code Section 312.6.

Storm water

All storm water shall be appropriately discharged to avoid water intrusion or negative impacts to the neighboring properties.

Mechanical

- There shall be an atmospheric separation between a garage and dwelling unit - i.e., a dwelling unit cannot share a ventilation system with a garage. The dwelling shall have an independent HVAC system within the dwelling unit. If a mechanical closet is provided in the garage, it shall meet the MMC (IFGC) Section 303.
- Fuel-fired appliances shall not be installed in sleeping rooms, bathrooms and storage closets. See MMC (IFGC) Section 303.
- Location of mechanical intake and exhaust should be 10 feet away from each other. See MMC Sections 401.4 and 501.3.
- Exhaust openings shall be 3 feet from property lines and 3 feet from operable openings into buildings. See link below for more information:

[Read Minnesota Mechanical Code](#)

Electrical

Electrical permits are administered by Minnesota Department of Labor and Industry (DOLI).

[Read electrical requirements](#)

Zoning

[Read Minneapolis zoning requirements](#)

[Download ADU permit application](#)